### ACAST Workshop August 24-25, 2004

# OCEANIC/REMOTE COMMUNICATIONS & SURVEILLANCE

**BREAKOUT SESSION** 



#### Welcome:

All, Co-chair, Speakers, and Recorder.

Kevin Grimm (FAA) - What FAA is doing

Mike Harrison (AMA) – Where we'll want to go

Kathy Kearns (SITA) - What providers can do

Bryan Welch (NASA) - What we should remember

Isi Greenfeld (NASA) - What should we do

#### <u>Intent of Workshop</u>:

ACAST Oceanic/Remote motivation & plans Gather participants' perspectives re: required and doable Help us focus on the practical



#### **Situation:**

VHF limited to horizon.

HF unreliable.

Fixed routes and procedural separations

Global trade requires global access

Emerging Pacific Rim calls for Polar Routes

Africa & Asia have no/little infrastructure

AMSS "global" coverage; "relatively" expensive

Pilot and controller workload and errors

U.S. responsible for 80% of oceanic domain



Is this the Big Question? --

Can we leverage AMSS –
Airline Operations
Airline Administration
Passenger Services

To obtain, AMSS – Air Traffic Services?



Is this the Big Answer? --

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ADS over AMSS –
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ID

"Accurate" position + Next

Wx

"Frequent" updates

Automated

"Direct Pilot/Controller"



#### **History**:

Aeronautical Satcom visions, plans, studies, efforts around since the 70s.

Support from ICAO, FAA, Airlines, and Industry.

Efforts include demos/tests; most recently Capstone & Boeing GCNSS.

#### ACAST's Challenge:

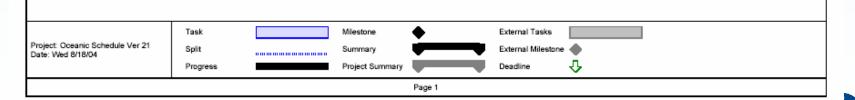
What can we reasonably get into place within the next 10 years?



	Oceanic Sub-Project																	
ID	WBS	Task Name	2005	2005				2006				2007				2008		
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	
1	G	Oceanic																
2	G.1	Oceanic C&S Concept Definition									•							
24	G.2	Oceanic C&S Satcom Feasibility Validation																
53	G.3	Oceanic C&S System Demonstration																
110	G.4	Enable ASAS Communications											_					

#### Oceanic/Remote C&S Plans:

- Business Case
- •Requirements and Concept Definition
- Technology Assessment
- •Feasibility Study
- Demonstration



#### **Discussion Questions:**

What we came up with ---

- •What cost elements are presenting barriers to full equipage with satcom avionics capable of enabling 30/30 separation in oceanic domains?
- •What are the regional differences in Oceanic ATC regimes that must be considered in developing both global and transparent oceanic solutions?
- •What is the value of real-time, oceanic weather data and should it be factored into the oceanic communications solution?



#### **Discussion Questions:**

What I'd like to ask ---

•What are top 3 oceanic problems?

•What technologies would ameliorate them?



## Discussion:

